



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,297	02/15/2002	Shih Chieh Lin	LINS3016/EM	8980
23364	7590	12/16/2004	EXAMINER	
BACON & THOMAS, PLLC			CHO, UN C	
625 SLATERS LANE				
FOURTH FLOOR			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22314				2687

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/075,297	LIN, SHIH CHIEH
	Examiner Un C Cho	Art Unit 2687

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 06 August 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-5 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date: _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hong et al. (US 2002/0128050) in view of You et al. (US 6,501,246).

Regarding claim 1, Hong discloses a power-supply arrangement using cascaded wireless mobile devices comprising a first wireless mobile device (Fig. 6, 300) having a load device (principal parts such as a controller, not shown) and a first battery device (first battery connected to input, Fig. 6, 302, not shown) for supplying power to the load device (principal parts such as a controller, not shown) and at least one second wireless mobile device (Fig. 6, 100) powered by a second battery device (Fig. 6, 200), wherein the second wireless mobile device is electrically connected to the first wireless mobile device (second wireless mobile device, Fig. 6, 200, is electrically connected to the first wireless mobile device, Fig. 6, 300, through a power cable, Fig. 6, 400) and the battery device of the first wireless mobile device is cascaded with the battery device of the second wireless mobile, said first battery device and said second battery device being connected together for supplying power to the load device of the first wireless mobile device (Hong, Paragraph 0025, lines 1 – 8).

However, Hong does not specifically disclose connecting a second device to the first device when said first battery device is too weak to power said first wireless mobile device. In an analogous art, You discloses connecting a second device (handy battery charger, Fig. 1, 11) to the first device (cellular phone, Fig. 1, 5) when said first battery device is too weak to power said first wireless mobile device (handy battery charger to recharge a cellular phone battery, Col. 3, lines 46 – 51). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of You to Hong in order to provide a handy battery charger for cellular phones wherein dry cells are held in the charger body to readily recharge the cellular phone battery at any time regardless of the place.

Regarding claim 2, Hong in view of You as applied to claim 1 above discloses that at least one second wireless mobile device contains a plurality of second wireless mobile devices each having a respective said second battery device, said second battery devices being cascaded together with the first battery device (wireless mobile device connected with another mobile device, through a power cable, thus making batteries cascaded together, Fig. 6, Hong, Paragraph 0025, lines 1 – 8).

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hong in view You as applied to claim 1 above, and further in view of Satoh et al. (US 6,643,527).

Regarding claim 3, Hong in view of You as applied to claim 1 above discloses the limitations of claim 1.

However, Hong in view of You as applied to claim 1 above does not specifically disclose a voltage stabilizer arranged between the load device and the battery device of the first wireless mobile device. In an analogous art, Satoh teaches a voltage stabilizer (Fig. 2, 51) arranged between the control unit (Fig. 2, 60) and the battery device (Fig. 2, 80) of a portable telephone (Fig. 1, 10) (Satoh, Col. 3, lines 49 – 56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Satoh to the modified system of Hong and You in order to provide a power switching unit of a portable telephone having a data storage function such as an electronic pocket notebook function that can be used even if a supply voltage from a battery drops.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hong in view of You, further in view of Satoh as applied to claim 3 above, and further in view of von Ruti (US 3,749,946).

Regarding claim 4, Hong in view of You and further in view of Satoh as applied to claim 3 above discloses the limitations of claim 3.

However, Hong in view of You and further in view of Satoh as applied to claim 3 above does not specifically disclose that the voltage stabilizer being a zener diode. In an analogous art, von Ruti teaches that the voltage stabilizer comprises of a zener diode (von Ruti, Col. 3, lines 24 – 25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of von Ruti to the modified system of Hong, You and Satoh in order to provide an electrical circuit comprising a voltage stabilizer to prevent the supply of the amplifier circuit creating an interference voltage at the screen.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hong in view of You as applied to claim 1 above, and further in view of Nakanishi et al. (US 5,177,426).

Regarding claim 5, Hong in view of You as applied to claim 1 above discloses the limitations of claim 1.

However, Hong in view of You as applied to claim 1 above does not specifically disclose a switch device arranged between the load device and an electrode of the battery device of the first wireless mobile device, first and second connectors connected to two terminals of the switch device and a detecting device arranged between the first connector and the second connector for disconnecting the switch device when detecting an electrical connection and otherwise conducting the switch device. In an analogous art, Nakanishi discloses

a switching circuit (Fig. 2, 10) arranged between the load (Fig. 2, 8) and the battery (Fig. 2, 7) of the handset (Fig. 2, B), first and second connectors (Fig. 2, 2 and 3) connected to two terminals of the switching circuit and switch control circuit (Fig. 2, 9) arranged between the first connector and the second connector for disconnecting the switching circuit when detecting an electrical connection and otherwise conducting the switching circuit (Nakanishi, Col. 3, lines 12 – 46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Nakanishi to the modified system of Hong and You in order to provide over-discharge protection circuitry for the battery charging circuit in a portable apparatus.

Response to Arguments

6. Applicant's arguments with respect to claims 1 – 5 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Roh (US 2003/0050102) discloses an apparatus and method for allowing a mobile device with a dead battery to be charged by another mobile device with a charged battery.

Taguchi et al. (US 2002/0147036) discloses auxiliary charging device for a mobile phone.

Hsueh (US 6,821,670) discloses an emergency charging of the mobile phone battery.

Tung et al. (US 6,528,969) discloses a mobile phone that can be recharged from a set of batteries contained in a battery box.

Shinozuka (US 5,334,076) discloses a radio control car allowing the self-running car to be charged by the battery unit when a charged terminal of the accumulating unit of the self-running car is connected with a charging terminal of the battery unit of said controller.

Yang (US 6,433,508) discloses a system to provide power to a peripheral device is equipped with a primary cell, secondary rechargeable cell or super capacitor.

Yamaguchi et al. (US 5,343,136) discloses a cordless telephone system in which a battery of a mobile unit can be charged with use of a cordless charger.

Art Unit: 2687

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Un C Cho whose telephone number is (703) 305-8725. The examiner can normally be reached on M ~ F 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (703) 306-3016. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Un C Cho 12/18/04 UC
Examiner
Art Unit 2687

Lester G. Kincaid
PRIMARY EXAMINER